



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,229	01/29/2001	Robin Young Smith	9258-2	9684

7590 11/18/2003

Mitchell S. Bigel
Myers Bigel Sibley & Sajovec
Post Office Box 37428
Raleigh, NC 27627

EXAMINER

TO, BAOQUOC N

ART UNIT	PAPER NUMBER
----------	--------------

2172

DATE MAILED: 11/18/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/772,229

Applicant(s)

SMITH ET AL.

Examiner

Baoquoc N To

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/06/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) 12-17, 21-23, 35-40 and 55-60 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 18-20, 24-34, 41-54 and 61-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION.

Election/Restrictions

1. Restriction to one of the following invention is required under 35 U.S.C. 121

I. Claims 1-11, 24-34, 44-54, 18-21, 41-43, and 61-63 are drawn to searching for the list of reagent chemical, list of equipment and procedure to synthesize the target chemical, which is classified in Class 707, subclass 3.

II. Claims 12-17, 35-40, 55-60 and 21-23 are drawn to creating the chemical database structure, which is classified in Class 707, subclass 100.

2. Inventions I and II are related as subcombinations disclosed as usable together as a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I is drawn searching for the list of reagent chemical, list of equipment and procedure to synthesize the target chemical. The created chemical database structure in invention II utilized to populate the data structure in the database. See M.P.E.P 806.05(d)

3. Because the inventions are distinct for the given reasons and have acquired in a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Art Unit: 2172

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even through the requirement be traversed (37 CFR 1.143).

6. Application is reminded that upon cancellation of claims in compliance with 37 C.F.R. 1.48(b) if one or more of the currently named inventor is no longer an inventor of at least one claim remaining in the application. Any amendment of inventor ship must be accompanied by a diligently-file petition under 37 C.F.R 1.48(b) and by fee required 37 C.F.R. 1.17(h)

7. After the telephone conversation with applicant representative Mitchell S. Bigel, Registration No. 29,614. Mr. Bigel elected invention I, claims 1-11, 24-34, 44-54, 18-21, 41-43, and 61-63 with traversed *on June 16, 2003*

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

8. Claims 1-11, 24-34, 44-54, 18-20, 41-43 and 61-63 provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-11, 29-40, 54-65, 23-

Art Unit: 2172

25, 51-53 and 76-78 of copending Application No. 10/059818. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

9. Claims 1-11, 24-34, 44-54, 18-20, 41-43 and 61-63 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-11, 24-34, 44-54, 18-20, 41-43 and 61-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tipton et al. (US. Patent No. 6,097,995).

Regarding on claims 1, 24 and 44, Tipton teaches a computerized method of determining parameters for chemical synthesis comprising:

Accepting a user identification of a target chemical (col. 40, lines 63-67 and col. 21, lines 1-9); and

Displaying a listing of reagent chemicals (col. 6, lines 60-65) that are used to synthesis the target chemical, a listing of equipment (equipment) (18, fig.1) that is used to synthesis the target chemical and a listing of a procedure (fig. 174 procedure list) that is used to synthesis the target chemical by reacting the reagent chemicals in the equipment according to the procedure, in response to the user identification of the

Art Unit: 2172

target chemical. Tipton does not explicitly teach synthesis the target chemical.

However, Tipton teaches, "This class of chemicals was included in the present system to meet the need of various entities to mix maintain their own sites mixtures that are used and prepared for repeated use by the particular entity...to crate mixtures for dazzling chemicals..." (col. 26, lines 39-50). This teaches using the list of chemical, the equipment and the procedure to mix the chemicals. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include synthesizing the target chemicals by the supplied chemicals, equipments and procedures to produce the chemicals that user requested.

Regarding on claims 2, 25 and 45, Tipton teaches accepting user input to order the target chemical, the reagent chemicals that are used to synthesize the target chemical and/or the equipment that is used to synthesize the target chemical (request chemical) (col. 40, lines 53-67); and

Electronically ordering the target chemical, the reagent chemicals that are used to synthesize the target chemical and/or the equipment that is used to synthesize the target chemical, in response to the user input to order the target chemical, the reagent chemicals that are used to synthesize the target chemical and/or the equipment that is used to synthesis the target chemical (col. 40, lines 43-67).

Regarding on claims 3, 26 and 36, Tipton teaches the accepting a user identification of a target chemical is preceded by:

Entering into a database, a plurality of target chemicals, a plurality of corresponding listings of reagent chemicals that are used to synthesize the plurality of target chemicals, a plurality of corresponding listing of equipment that is used to synthesize the plurality of the target chemicals and a plurality of corresponding listing of procedures that are used to synthesize the plurality of target chemicals by reacting the corresponding reagent chemicals in the corresponding equipment according to the corresponding procedure (col. 25, lines 20-30).

Regarding on claims 4, 27 and 47, Tipton teaches accepting user input to order the target chemical, the reagent chemicals that are used to synthesize the target chemical and/or the equipment that is used to synthesize the target chemical (col. 40, lines 63-67); and

Electronically ordering the target chemical, the reagent chemicals that are used to synthesized the target chemical and/or the equipment that is used to synthesize the target chemical, in response to the user input to the user input to order the target chemical, the reagent chemicals that are used to synthesize the target chemical and/or the equipment that is used to synthesize the target chemical (col. 40, lines 63-67).

Regarding on claims 5, 28 and 48, Tipton teaches accepting a user identification of a target chemical comprises accepting a user identification of a target chemical by chemical formula, chemical structure, chemical compound name and/ or CAS number (col. 41, lines 1-9).

Regarding on claims 6, 29 and 49, Tipton teaches accepting a user identification of a target chemical comprises:

Displaying a listing of target chemical that match the user query (col. 41, lines 4-5); and

Accepting a user selection of a target chemical from the listing of target chemicals that match the user query (col. 8-9).

Regarding on claims 7, 30 and 50, Tipton teaches accepting user identification of a target chemical comprises:

Accepting a user identification of a reaction type (col. 40, lines 63-67);

Displaying a listing of target chemicals that are synthesized using the reaction type (col. 41, lines 4-5); and

Accepting a user selection of a target chemicals from the listing of target chemicals that are synthesized using the reaction type (col. 41, lines 5-9).

Regarding on claims 8, 31 and 51, Tipton teaches the following is performed between the accepting and the displaying:

Displaying a listing of procedures that can be used to synthesize the target chemical (col. 40, lines 63-65); and

Accepting a user selection of a procedure from the listing of procedures that can be used to synthesis the target chemical (col. 40, lines 63-65).

Regarding on claims 9, 32 and 52, Tipton teaches the following is performed between the accepting and the displaying:

Accepting a user selection of a desired quantity of the target chemical (col. 40, lines 63-67); and

Scaling the listing of the reagent chemicals so as to synthesized the desired quantity of the target chemicals (col. 41, lines 1-9); and

Displaying a scale listing of the reagent chemicals that are used to synthesize the desired quantity of the target chemical, a listing of equipment that is used to synthesize the desired the desired quantity of the target chemical (col. 41, lines 1-9).

Regarding on claims 10, 38 and 63, Lipton teaches accepting a user identification of a target chemical comprises:

Displaying a prioritized listing of target chemicals that match the user query (col. 41, lines 1-10);

Accepting a user selection of a target chemical from the prioritized listing of target chemicals that match the user query (col. 41, lines 1-10).

Regarding on claims 11, 39 and 64, Lipton teaches accepting a user identification of a target chemical comprises:

Accepting user identification of a chemical (col. 40, lines 63-65);

Displaying a listing of procedures that use the chemical as a reagent chemical (col. 41, lines 1-10); and

Accepting a user selection of a procedure from the listing of procedures that use the chemical as a reagent chemical (col. 41, lines 1-10).

Regarding on claims 18, 41 and 61, Tipton teaches a computerized method of obtaining materials for chemical synthesis comprising:

Electronically ordering (requesting chemicals) a target chemical, reagent chemicals that are used to synthesize the target chemical and/or equipment (equipment) (18, fig. 1) that is used to synthesis the target chemical, from an electronically displayed listing (col. 41, lines 4-5) of the reagent chemicals that are used to synthesize the target chemical, of the equipment that is used to synthesize the target chemical and of procedure that is used to synthesize the target chemical by reacting by response to user input to order the target chemical, the reagent chemicals that are used to synthesize the target chemical and/or the equipment that is used to synthesis the target chemical. Tipton does not explicitly teach synthesize the chemicals reactions by the chemicals, equipments, and procedures. However, Tipton teaches, "This class of chemicals was included in the present system to meet the need of various entities to mix maintain their own sites mixtures that are used and prepared for repeated use by the particular entity...to crate mixtures for dazzling chemicals..." (col. 26, lines 39-50). This teaches using the list of chemical, the equipment and the procedure to mix the chemicals. Therefore, it would have been obvious to one ordinary skill in the art at the

time of the invention was made to include all the chemicals, equipments and procedures to allow the mixtures of the chemical to produce the target chemicals for user requested.

Regarding on claims 19, 42 and 62, Tipton teaches the electronically ordering comprises:

Electronically ordering a kit of the reagent chemicals that are used to synthesize the target chemical (col. 26, lines 29-53).

Regarding on claims 20, 43 and 63, Tipton teaches the electronically ordering comprises:

Electronically ordering a kit of the equipment that is used to synthesize the target chemical (col. 26, lines 29-53).

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.


The fax numbers for the organization where this application or proceeding is assigned are as follow:

- (703) 746-7238 [After Final Communication]
- (703) 746-7239 [Official Communication]
- (703) 746-7240 [Non-Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA 22202
Fourth Floor (Receptionist).

Baoquoc N. To
June 20, 2003


SHAHID ALAM
PRIMARY EXAMINER